



GIS FILE STRUCTURE IN BLM **CALIFORNIA**

by

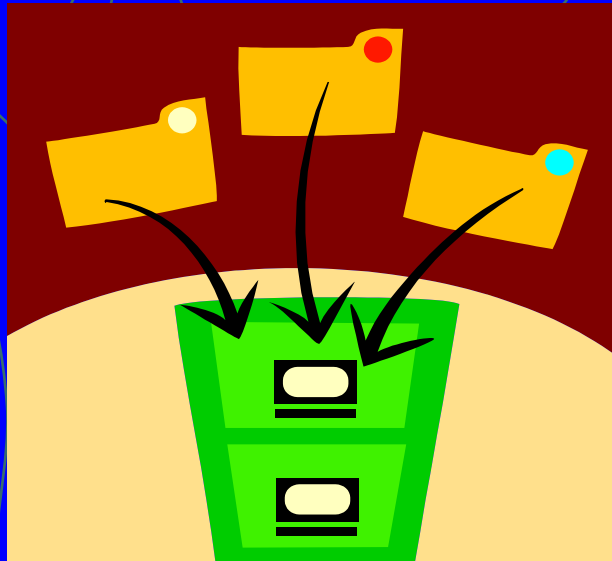
F. Kirk Halford

**Bishop Field Office Archaeologist
BLM CA and National Data Steward**

March 21, 2007

A Simple Matter of

Organization

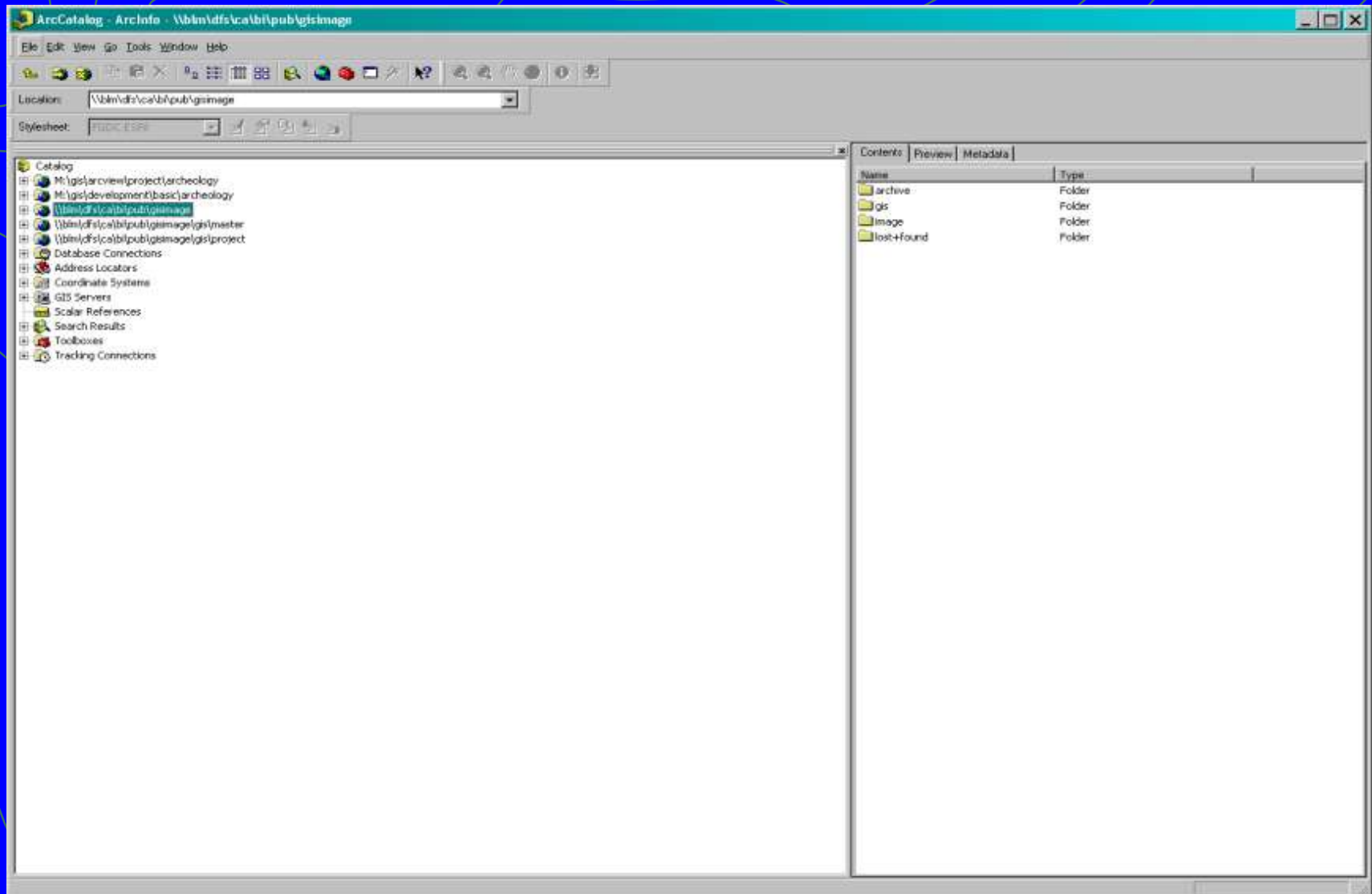


or

Not

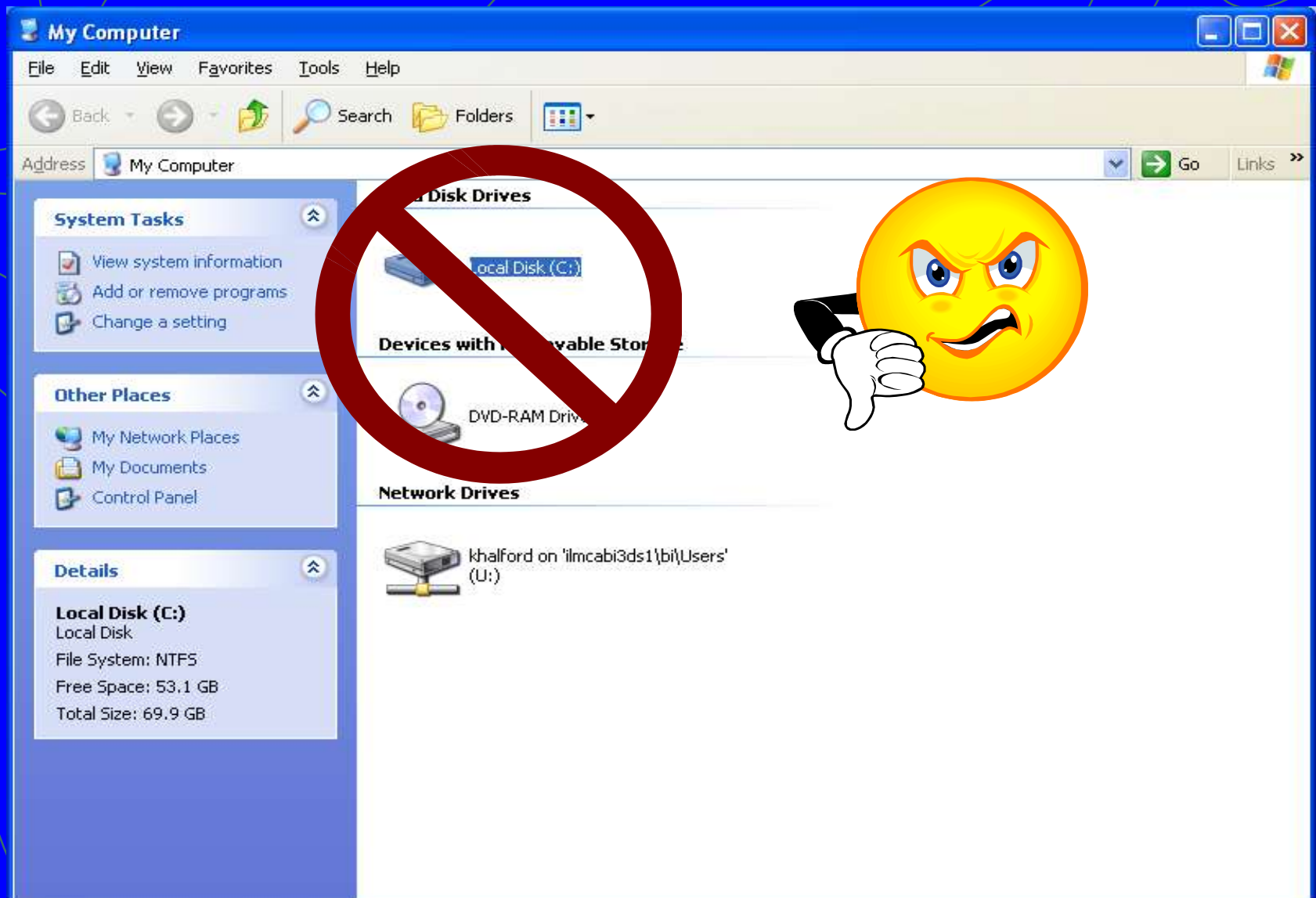


A Simple Matter of Organization



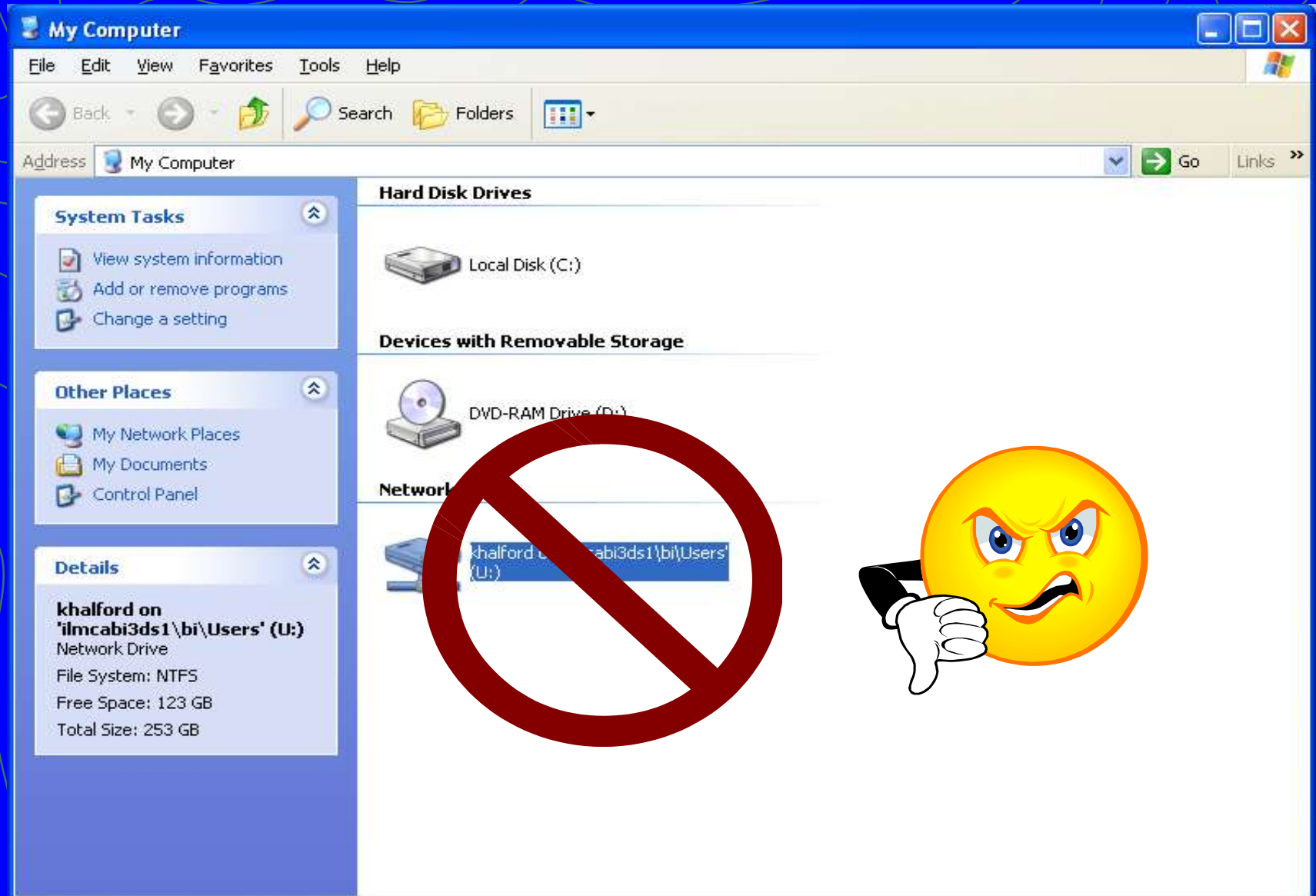
Or Not

Do Not File GIS Data on Your C: Drive



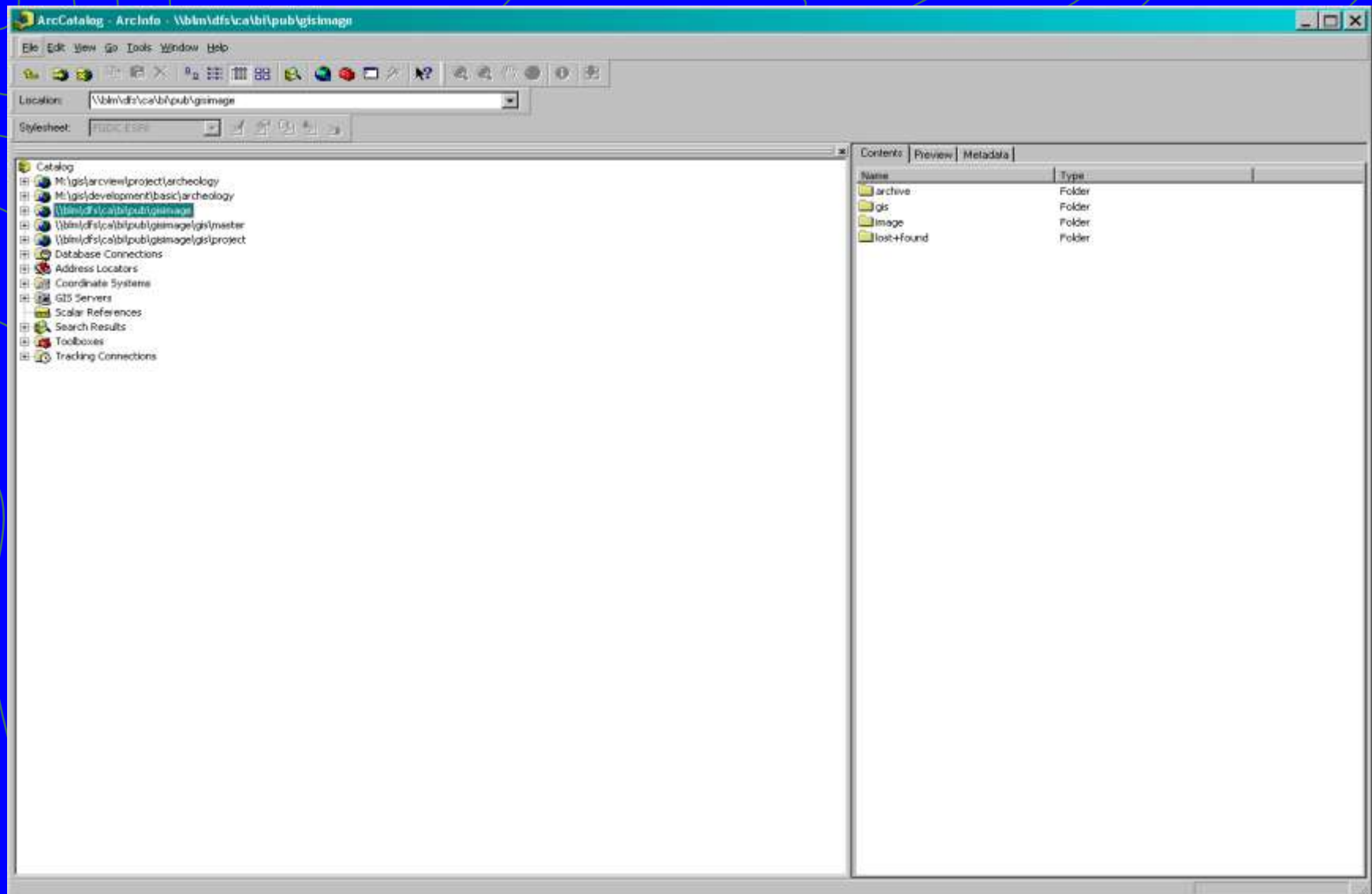
Or Not

Do Not File GIS Data on Your U: Drive



Organization

Do Use the GIS Directory: M:\
(\\blm\dfs\ca\bi\pub\gisimage)



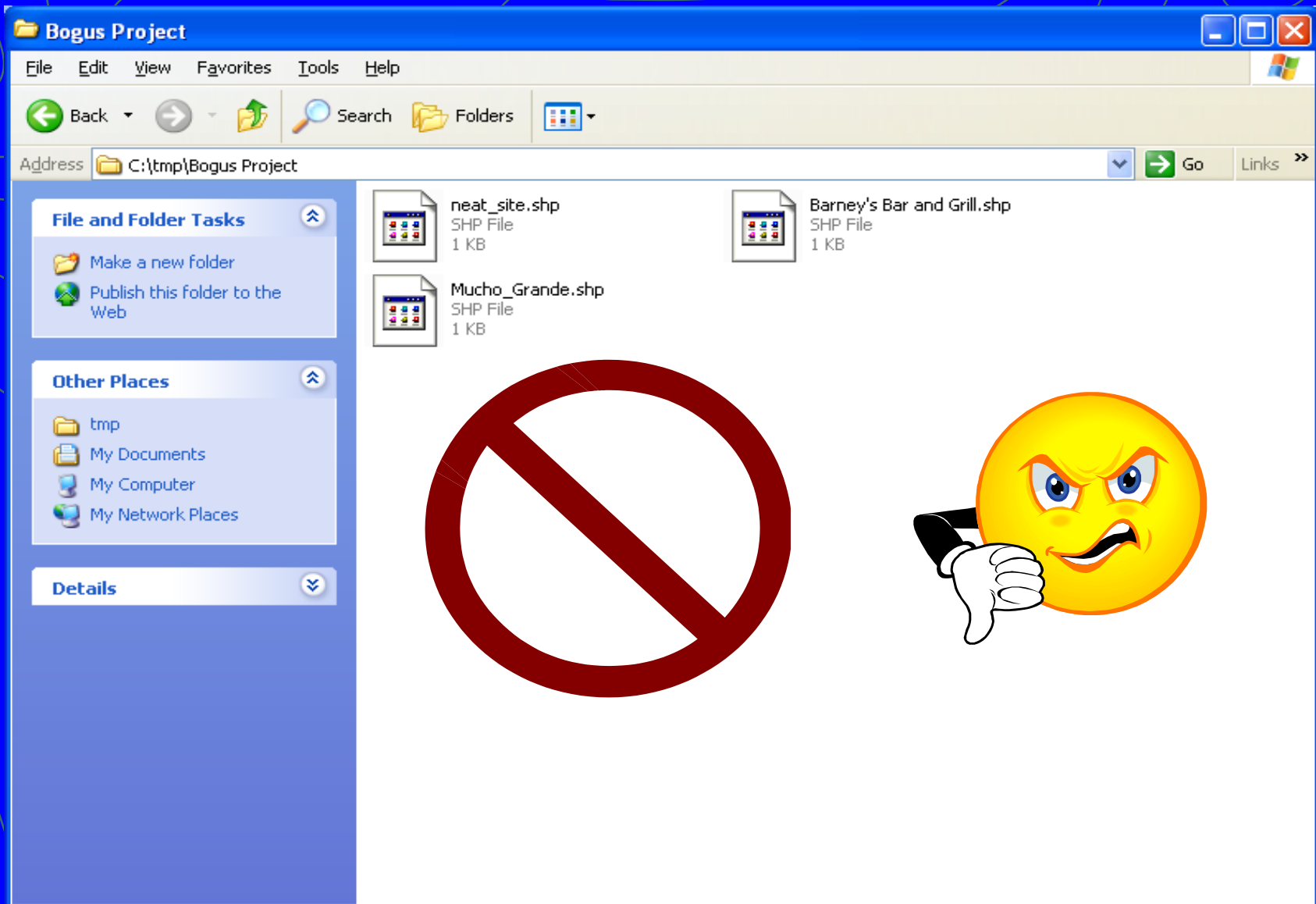
Or Not

Do Not Use Abstract Directory or Folder Names



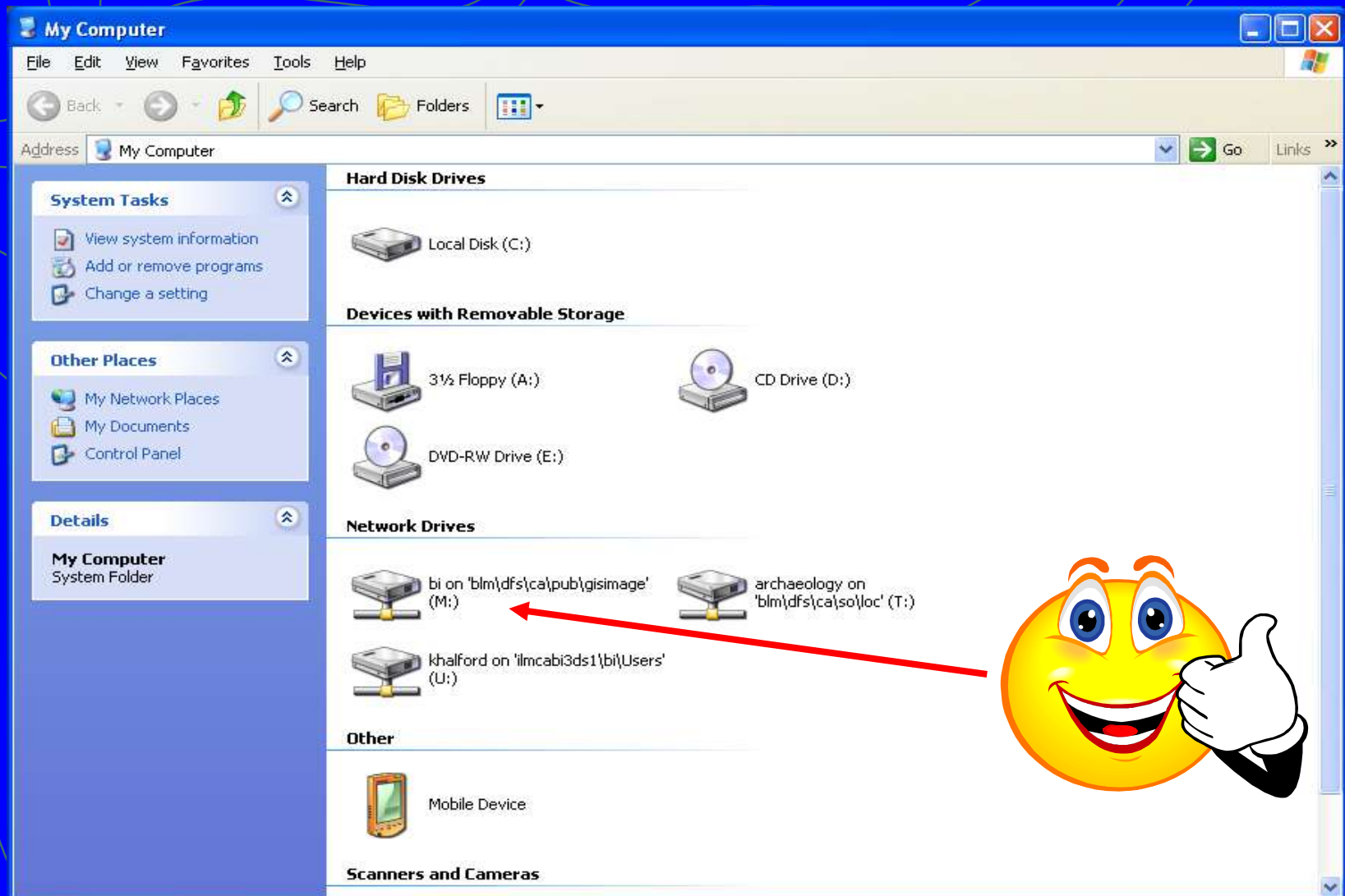
Or Not

Do Not Use Abstract File Names



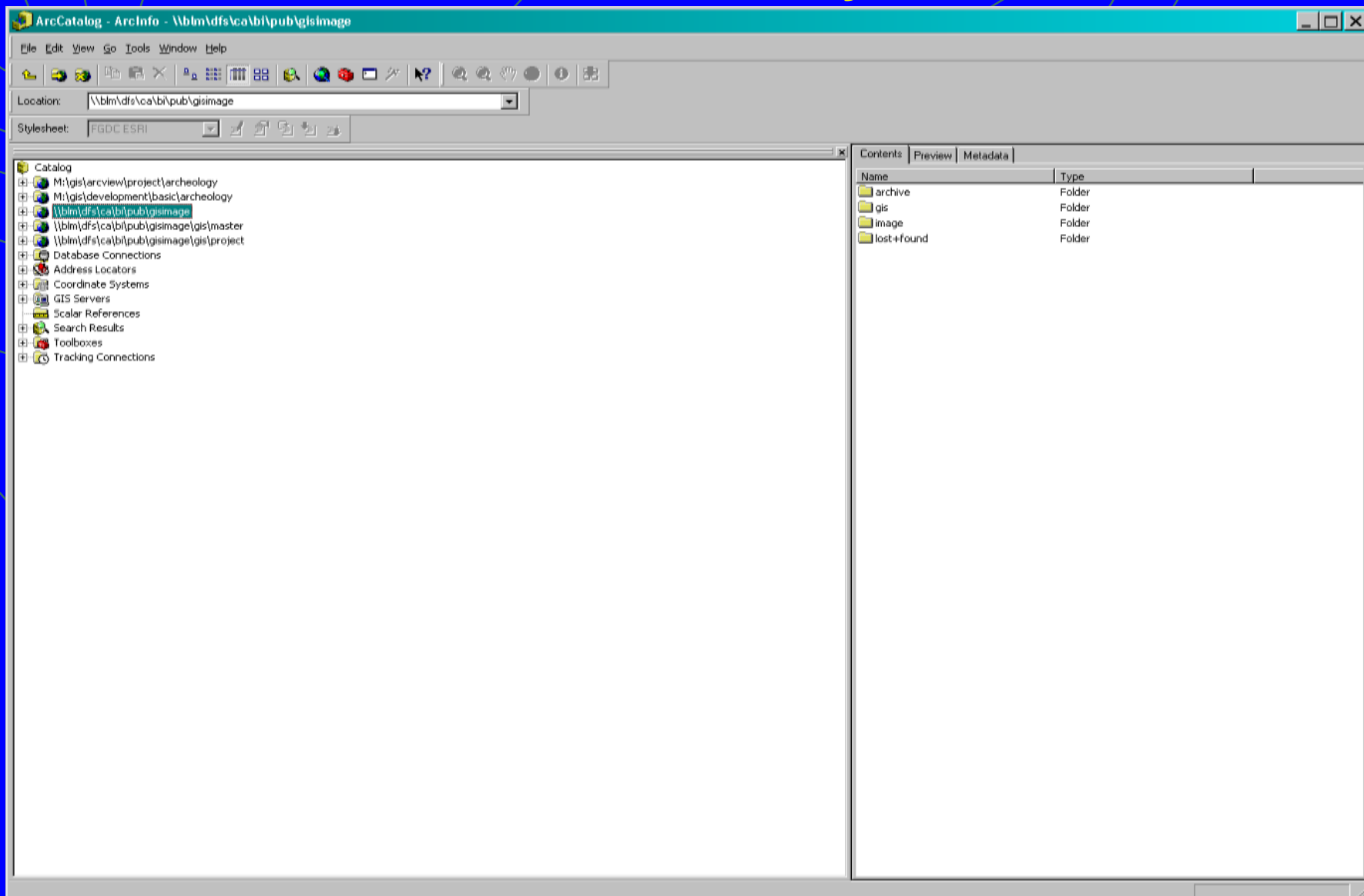
Organization

Do Use the GIS Directory: (M: Drive)



Organization

Do Use the GIS Directory Structure





Organization

Do Use the GIS Directory Structure

- **Benefits**
 - ♦ **Spatial Data Naming Conventions**
 - ♦ **Provides Interoffice Familiarity**
 - ♦ **Improves User Accessibility**
 - ♦ **Supports Robust Programming**
 - ♦ **Promotes Data Security**



Organization

Do Use the GIS Directory Structure

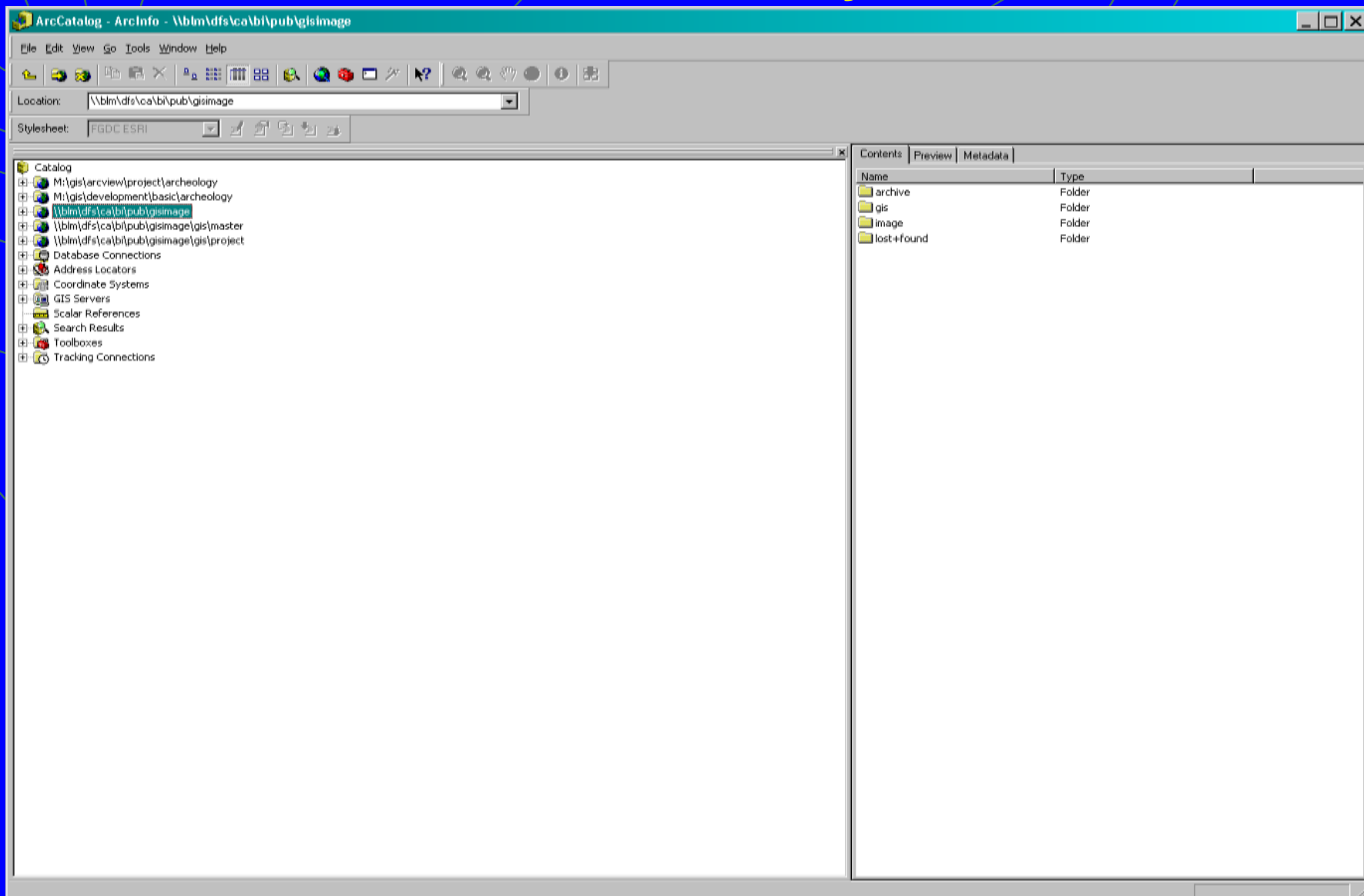
**The M:\ Drive (gisimage)
bi on blm\dfs\ca\pub\gisimage**

**GIS Equivalent of U:\ - GIS Home
Two Primary Directory Trees**

- ◆ **M:\gis**
 - ◆ **Stores All Non-Image Spatial Data**
- ◆ **M:\image**
 - ◆ **DRGs, DOQs, and Satellite Imagery**

Organization

Do Use the GIS Directory Structure





Organization

Do Use the GIS Directory & File Structure

M:\gis\...

Stores All Non-Image Spatial Data

Three Primary Data Storage Trees

- ♦ M:\gis\development\basic...
- ♦ M:\gis\project\...
- ♦ M:\gis\master\...

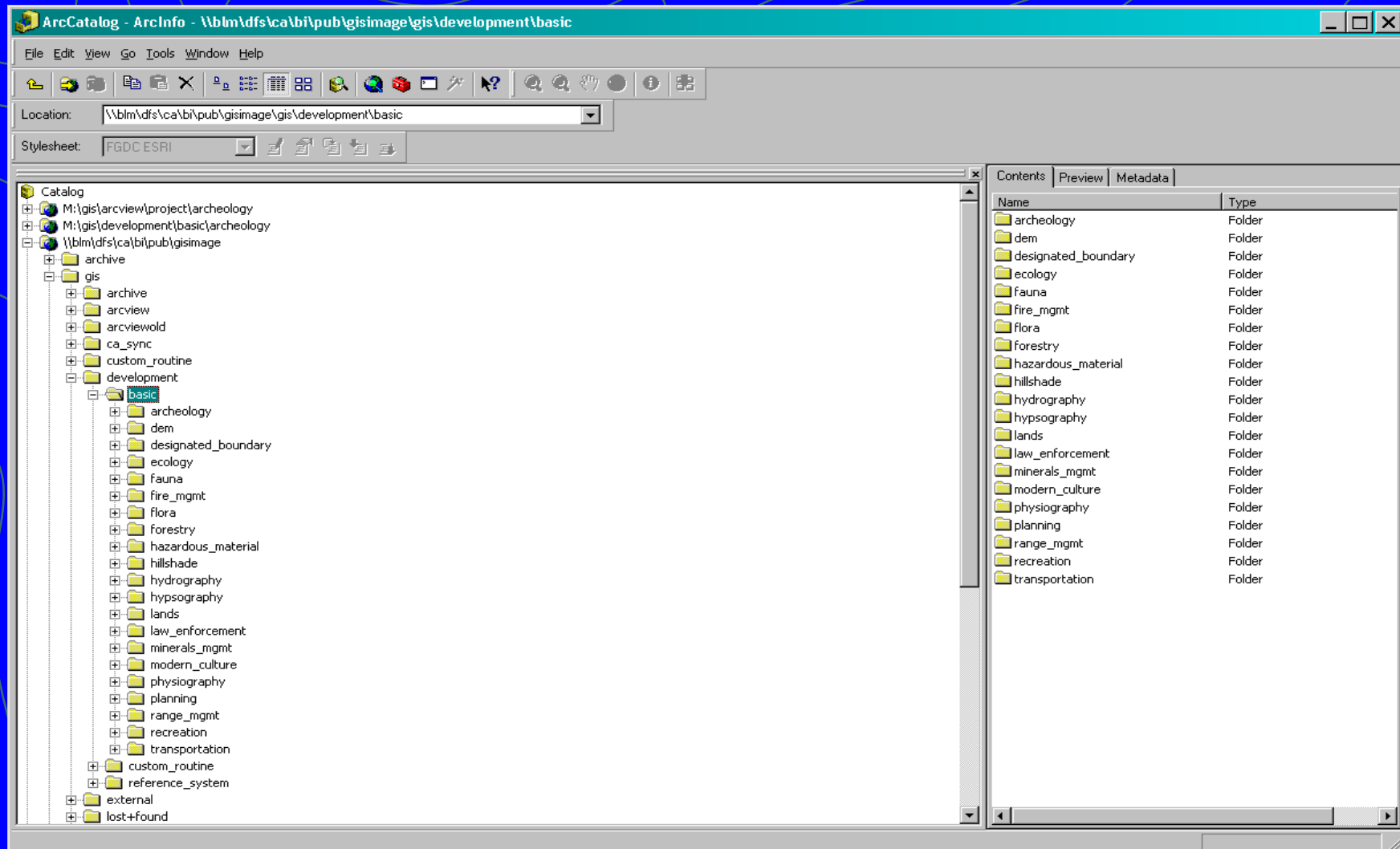
One Primary .mxd Storage Area

- ♦ M:\gis\arcview\...

Organization

Do Use the GIS Directory Structure

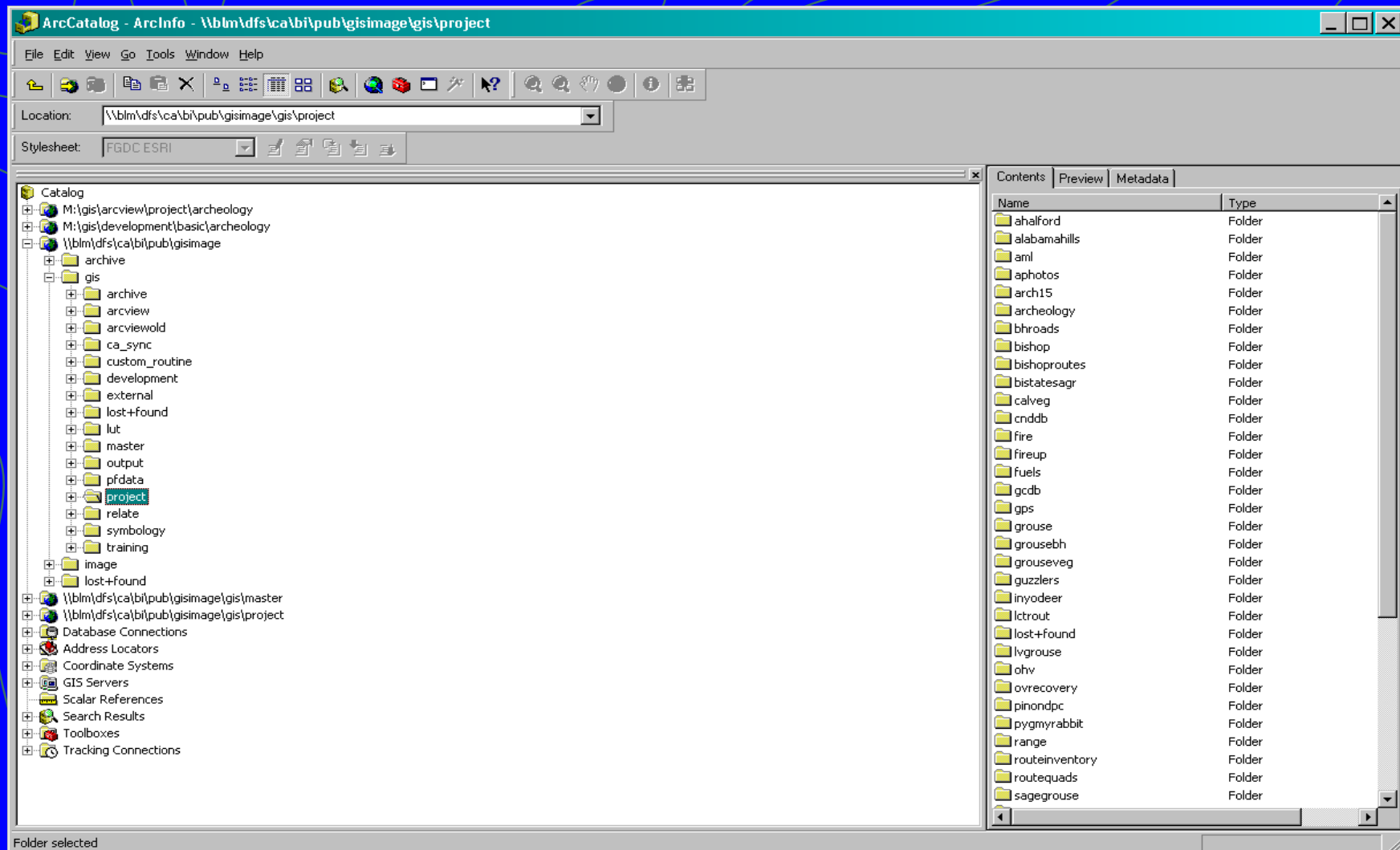
M:\gis\development\basic\...



Organization

Do Use the GIS Directory Structure

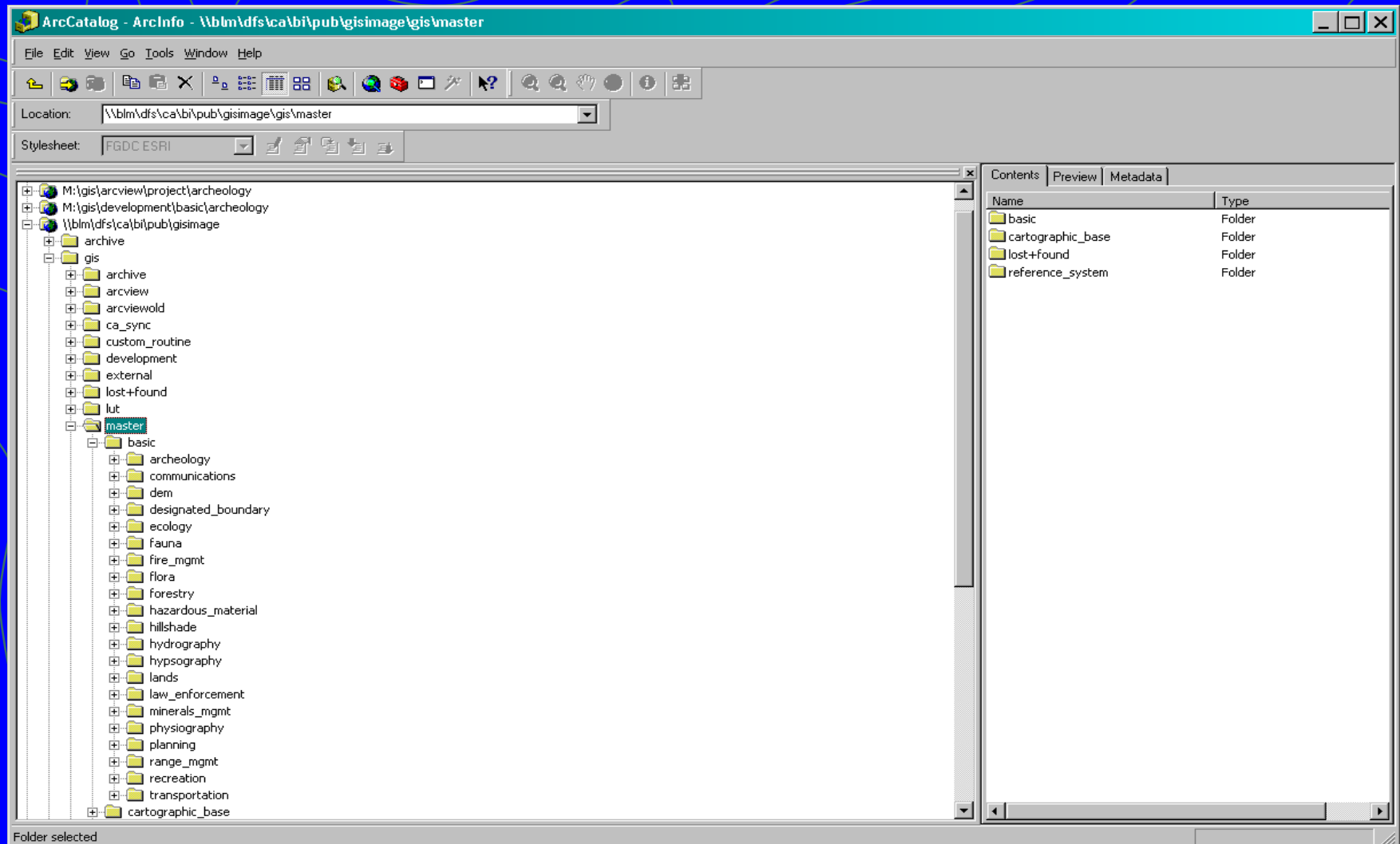
M:\gis\project\...



Organization

Do Use the GIS Directory Structure

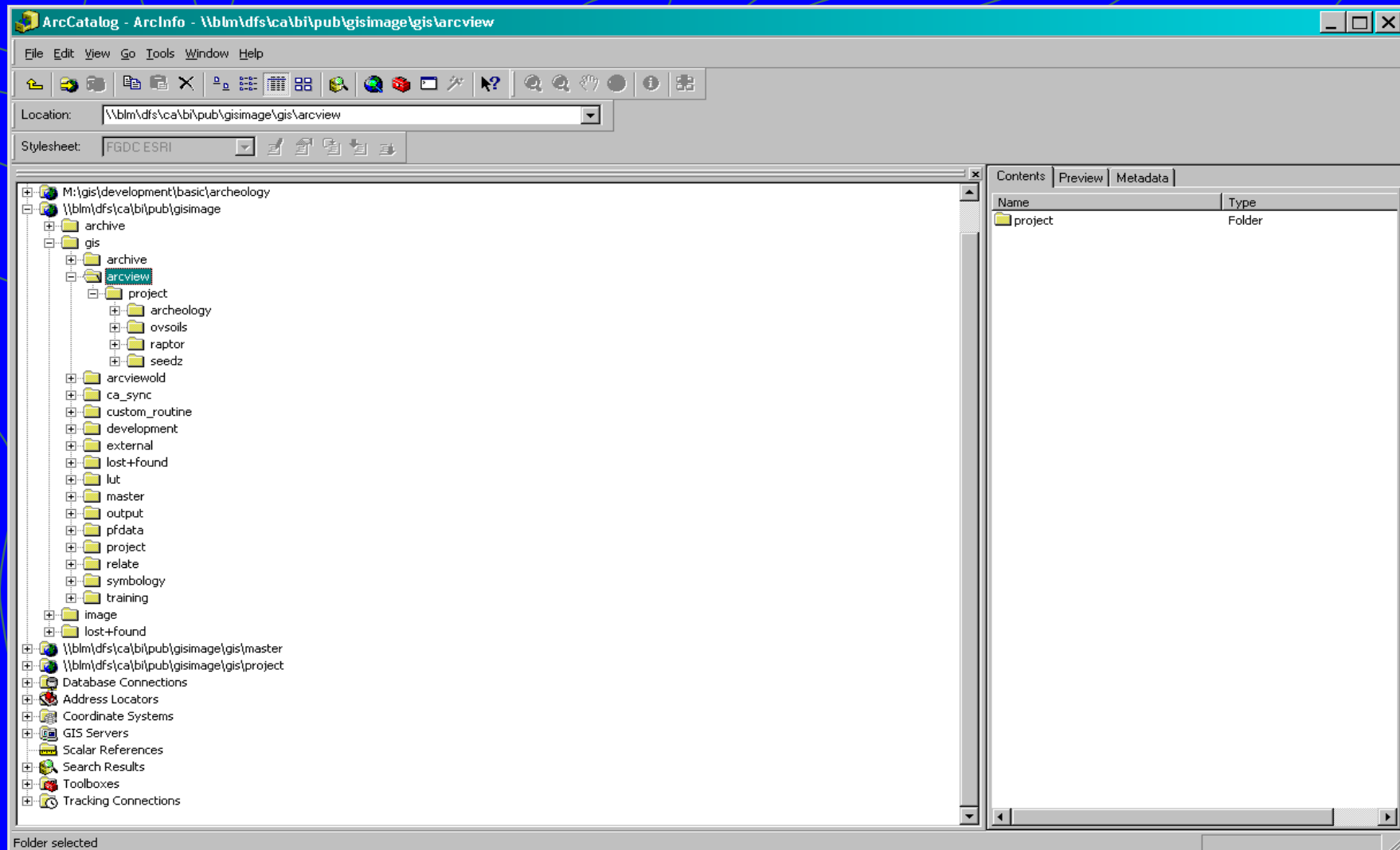
M:\gis\master\...



Organization

Do Use the GIS Directory Structure

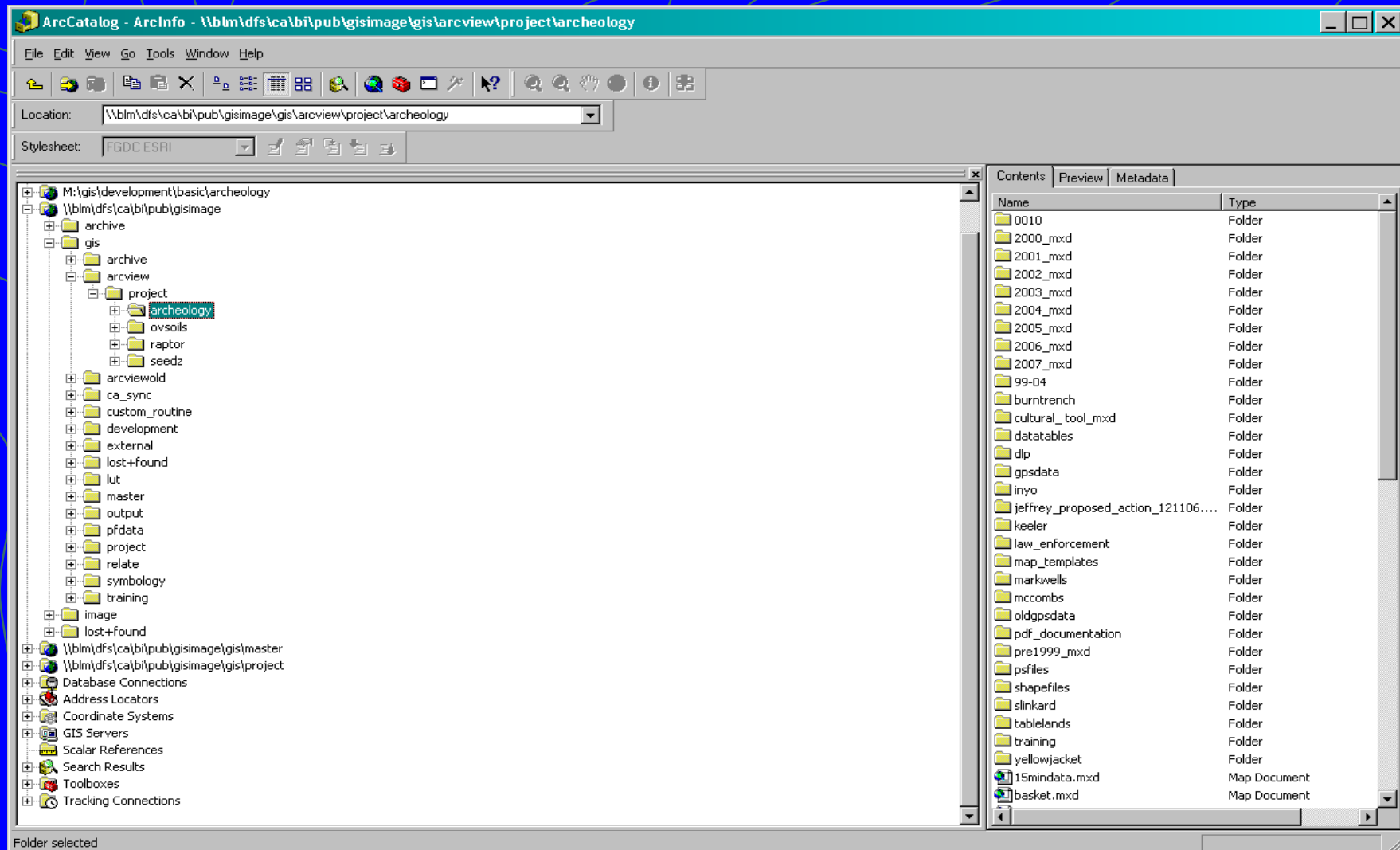
M:\gis\arcview\...



Organization

Do Use the GIS Directory Structure

M:\gis\arcview\project\archeology





Organization

Do Use the GIS Theme & Feature Naming Conventions

Designed for the Coverage Data Model

- ♦ **Limited to Thirteen Characters**

Concatenation of Three Code Strings

- ♦ **Theme Code (First 3 Characters)**
- ♦ **Feature Type (Fourth Character)**
- ♦ **Spatial Extent (5th-13th Characters)**

Flexible and Scaleable

Supports Programming



Organization

Do Use the GIS Theme Code Naming Convention

First 3 Characters Define Data Theme

Unique Code for Each Theme

Codes Exist for Many Themes

New Codes Added as Needs Arise

Examples

- ♦ ARCM, HYDLCA, WSAPBI, OWNPCA

Organization

Do Use the GIS Theme Naming Conventions

BLM California GIS Theme Codes

| <i>Theme Code</i> | <i>theme</i> | <i>Category</i> | <i>Domain</i> |
|-------------------|--|--------------------------|-------------------|
| acc | Area of Critical Environmental Concern | designated_boundary | basic |
| afd | airfield | transportation | basic |
| agr | agriculture | flora | basic |
| ahb | animal habitat | fauna | basic |
| ah | animal transect | fauna | basic |
| aix | aerial photo index | photo_index | reference_system |
| ail | animal location | fauna | basic |
| ann | ArcInfo annotation | cartography | cartographic_base |
| aro | archeological site | archeology | basic |
| arf | archeological feature | archeology | basic |
| arg | animal range | fauna | basic |
| ari | archeological isolate | archeology | basic |
| ars | archeological survey | archeology | basic |
| asb | assembly district | designated_boundary | basic |
| asp | aspect data | physiography | basic |
| bim | BLM | designated_boundary | basic |
| cal | CA veg data | flora | basic |
| caf | CA Department of Forestry Ranger Units | designated_boundary | basic |
| cen | census tracts | designated_boundary | basic |
| cgs | congressional dis | designated_boundary | basic |
| cl | city or town | designated_boundary | basic |
| cko | California knock out | cartography | cartographic_base |
| con | contour | hydrography | basic |
| cru | cdf ranger unit | line_right | basic |
| cwt | cwt | designated_boundary | basic |
| cd | GCDB control | plus | reference_system |
| cty | county | designated_boundary | basic |
| dem | dem grid | digital elevation models | basic |

Organization

Do Use the GIS Feature Type Naming Convention

Fourth Character Defines Feature Type

- ♦ M Marker (Point Feature)
- ♦ L Line (Arc Feature)
- ♦ P Polygon (Area Feature)
- ♦ G Grid (Grid Data)
- ♦ I Image (Image Data)

Examples

- ♦ ARCM, ARCL, HYDPCA, HYDLCA

A vertical strip on the left side of the slide shows a topographic map with contour lines and some color shading, likely representing elevation and land features.

Organization

Do Use the GIS Spatial Extent Naming Conventions

**Characters 5-13 Define Spatial Extent
Least Cryptic Portion of the Name**

Addresses a Wide Range of Extents

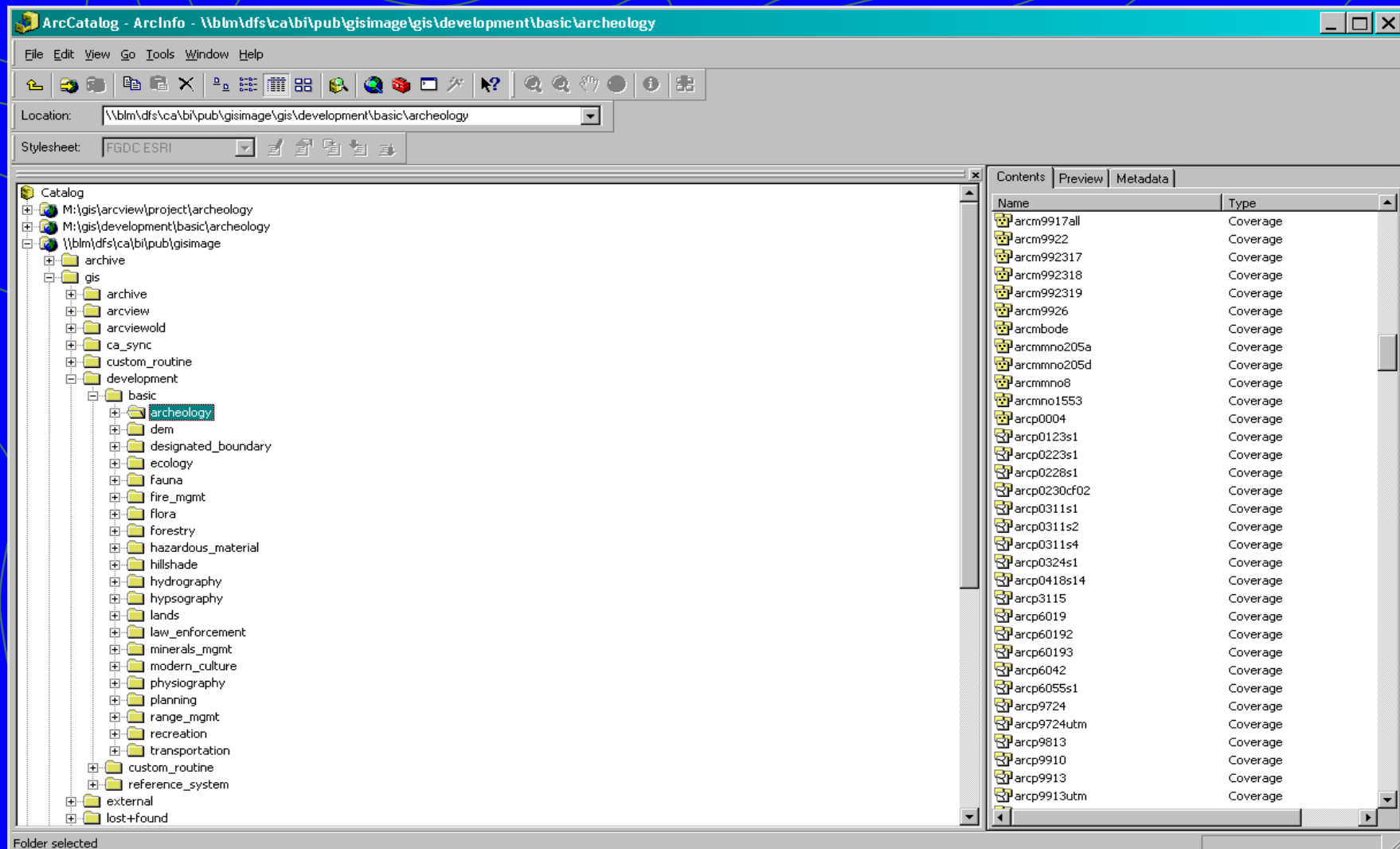
- ♦ **States, Field Offices, Project Areas,
Quadrangles, Etc...**

Examples

- ♦ **ARCPCA, ARCMBODIE, ARSL38119H1
ARCM0701S1, ARCPMNO3125**

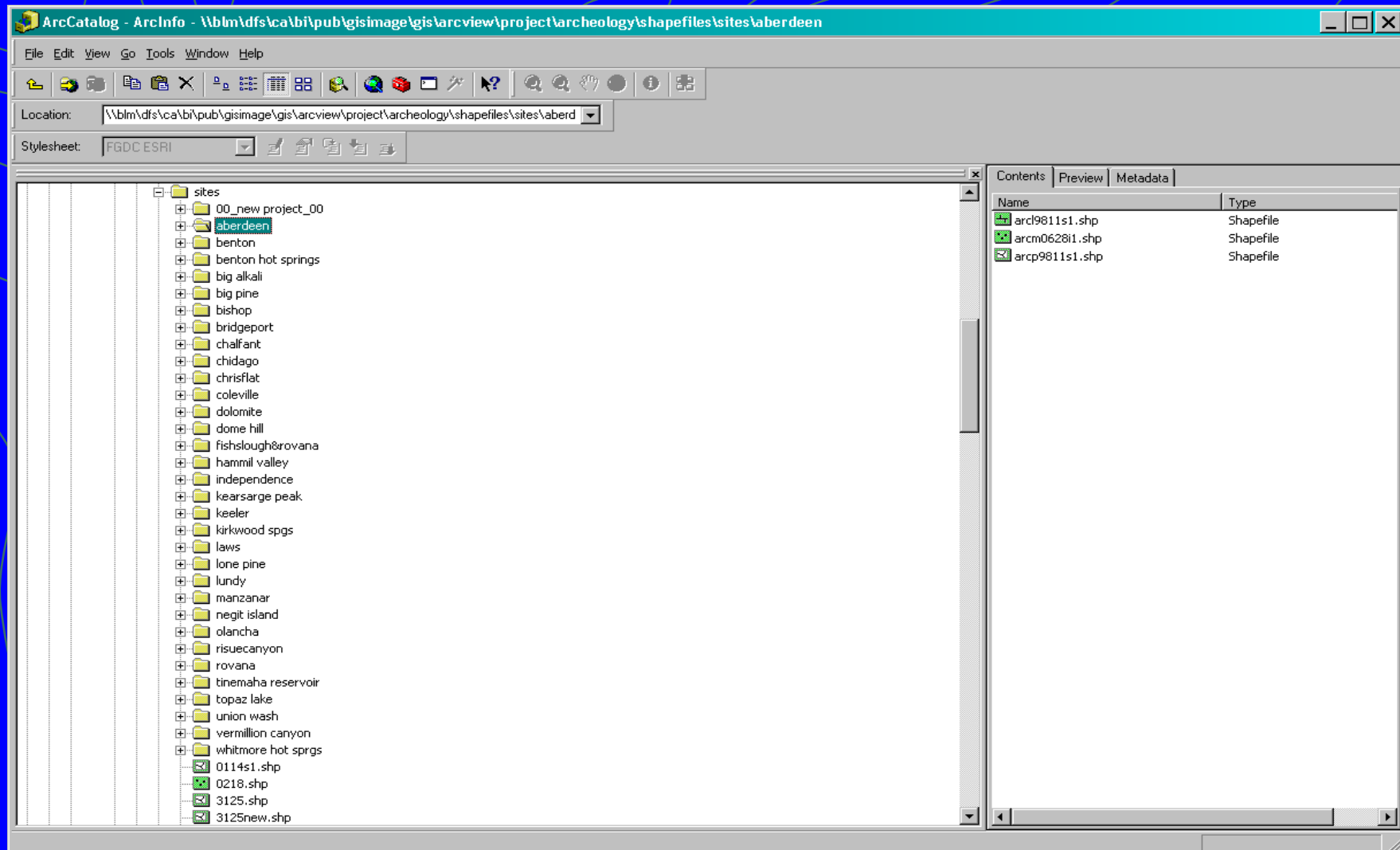
Organization

Do Use the GIS Naming Conventions



Organization

Do Use the GIS Naming Conventions for Resources



Organization

Do Use the GIS Naming Conventions for Investigations

